

GENEVA SMALL AREA PLAN



GENEVA SMALL AREA PLAN

BRIGHAM YOUNG UNIVERSITY
URBAN PLANNING CAPSTONE TEAM

BRIAM AMAYA
MICHAEL LEE
MILES MILLER
ANDERS BAKE
CHAD GARNER
TREVOR WALSTON
CHASE CUSHING
DAVID JELLEN
SIERRA PIERSON

TABLE OF CONTENTS

Executive Summary	4	Key Recommendations	48
Project Area Map	5	Implementation Chart	49
Guiding Principles	6	Glossary	50
Proposed Land Use Map	7	References	51
Regional Commercial	8		
<i>Commercial Land Use</i>	<i>10</i>		
<i>Commercial Mixed-Use</i>	<i>10</i>		
<i>Transition Zone</i>	<i>13</i>		
Flex Office and Industry	17		
Connectivity	22		
<i>Overview</i>	<i>23</i>		
<i>The Promenade</i>	<i>23</i>		
<i>Street Layout</i>	<i>27</i>		
<i>On-Street Parking</i>	<i>30</i>		
<i>Public Transit</i>	<i>32</i>		
<i>Walkability & Active Transportation</i>	<i>37</i>		

EXECUTIVE SUMMARY

The city of Vineyard is one of Utah's fastest growing cities. This plan's purpose is to accommodate for Vineyard's rapid residential growth with recommendations for commercial and industrial growth. The Geneva Small Area Plan (henceforth referred to as 'the plan') outlines future land uses near proposed developments and how they can be compatible with active and public transportation. For the purposes of this document we have named the project area "The Geneva Pathway."

The plan recommends the creation of a Transit Oriented Development (TOD) within the Geneva Pathway. It provides land use suggestions for undeveloped areas of the city based on current demographics, employment, interests and projected population growth. The planning area is currently zoned for commercial and industrial uses. The plan recommends transitions between uses that promote connectivity.

The plan establishes a system that promotes economic growth by utilizing innovative transportation systems coupled with tactical land use practices. This system will promote a family-friendly atmosphere while attracting high-end businesses and services.

The plan contains two different zoning classifications: Flex Office and Industrial (FOI) and Regional Commercial (RC). The FOI Zone encompasses 273 acres with a 12 acre RC Zone at the northeast end of site at 1600 N and a 134 acre RC Zone at the southern end of the site along the Vineyard Connector. There is also an Industrial Zone (I-1) at the northeast end that is roughly 3 acres. The plan encompasses a total of 422 acres.

The project area is bound to the southwest by a 233 acre area zoned as Public Facility owned by UVU. Neighboring the south end of the project area is the 48 acre "The Forge" residential district. To the east of the project area is the Town Center, which is roughly 411 acres, separated by FrontRunner. Neighboring the northern boundary of the project area is 221 acres dedicated as a Manufacturing Zone, as well as another 66 acres of FOI.

The project area is open space that was formerly used by the Geneva Steel Plant. It is within a "brown field" site with contaminated soils. Much of the ground will be treated and be ready for future commercial and industrial developments. However, the Geneva Nitrogen Plant is still in operation and comprises the I-1 Zone.



VINEYARD
STAY CONNECTED

1600 N

1200 N

1050 N

Geneva Rd

Mill Rd

UVU

Vineyard Connector

The Forge

PROJECT AREA



0 0.25 0.5 Miles

GUIDING PRINCIPLES

1. Increase connectivity to intensify land use and development.

The plan includes strategies to improve connectivity within the Geneva Pathway area and the city of Vineyard. It provides numerous connections for residents, workers and customers to get in and out of the site with ease. These connections support the flow of resources and products facilitating the growth of revenue for the city.

2. Capitalize on location and surrounding area.

The Geneva Pathway will take advantage of the surrounding amenities to promote economic growth, such as its location to Utah Lake as a hub for outdoor recreation.

Much of the site is surrounded by land owned by Utah Valley University (UVU) with much of it being undeveloped. UVU's plan is centered around sporting facilities, a conference center and business education facilities. The plan recommends the construction of hotels and various retail shops to complement surrounding uses.



VINEYARD
STAY CONNECTED



- Research
- Office Hybrid
- Industrial Medium
- Industrial Light
- Dealership
- Hotel
- Light Retail
- Office
- Regional Retail
- Retail Center
- Parking
- Specialized Park
- Project Area
- New Roads

UVU

1600 N

1200 N

1050 N

Mill Rd

Geneva Rd

Vineyard Connector

The Forge

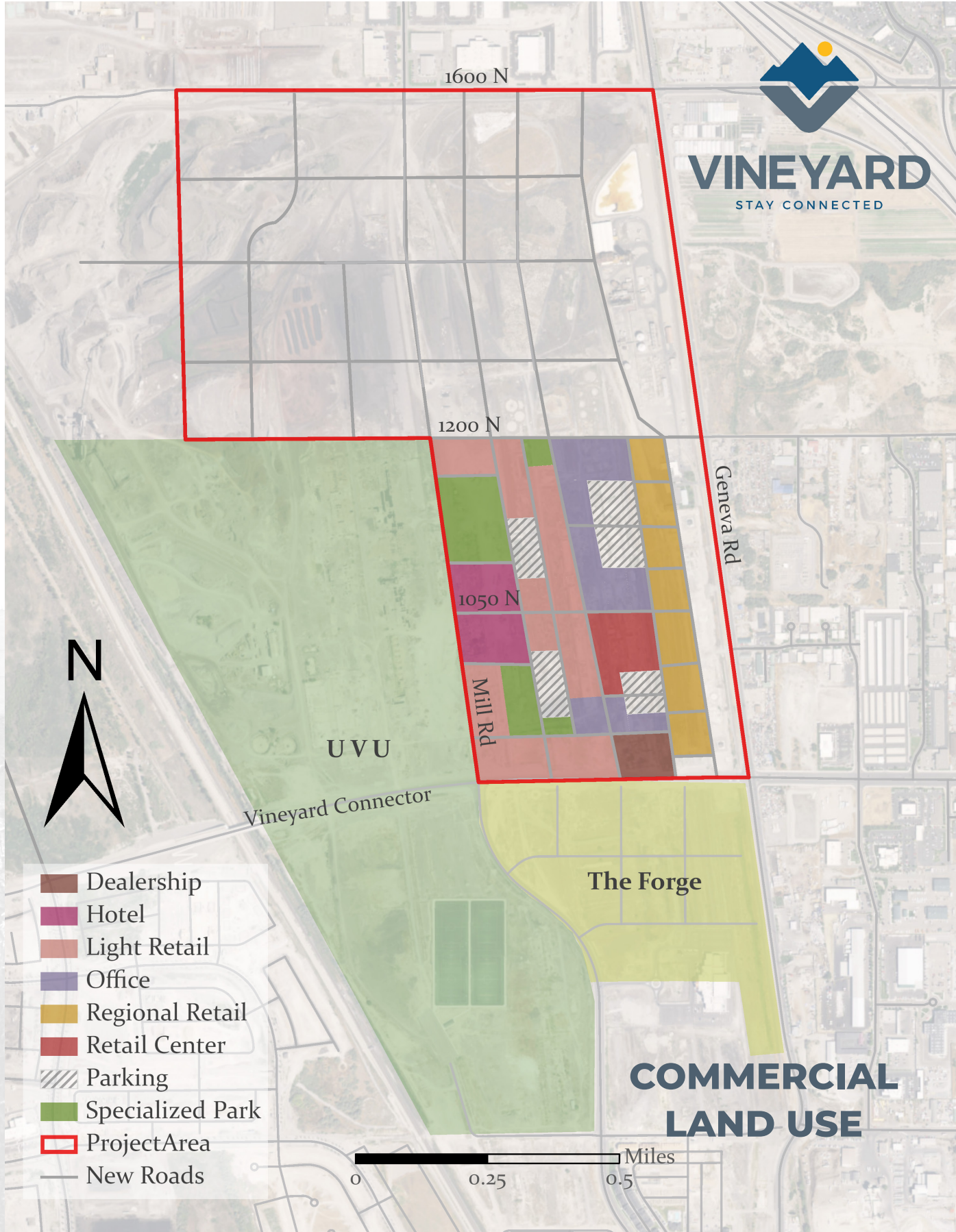
PROPOSED LAND USE MAP

0 0.25 0.5 Miles

GENEVA SMALL AREA PLAN

REGIONAL COMMERCIAL





COMMERCIAL LAND USE

The commercial land use sector recommends intensive commercial activity within the RC Zone. There are two land use designations within the RC: the Commercial Mixed-Use Designation and the Transition Zone. It recommends various leisure facilities such as hotels, restaurants, and cafes. The plan recommends a shopping center consisting of various retail stores to. The plan recommends mid to high rise office buildings to provide services and employment to residents of the city and adjacent areas. The plan makes the Geneva Pathway a center of employment.

COMMERCIAL MIXED-USE DESIGNATION

Area Overview

It is our recommendation to supply a balance of land uses throughout the designations to provide greater employment diversity and additional sources of tax revenue to the city. While a perfect balance is rarely possible, larger parcels containing single uses should be avoided.

The commercial mixed-use designation will be a variety of commercial and office together in both horizontal and vertical combinations. Commercial mixed-use makes for three-dimensional, pedestrian-oriented areas that combine compatible land uses, public

amenities, and utilities together. This allows people to live, work, play, and shop in one area, but most importantly decreases the likelihood of residents leaving the city to fulfill these needs.

Objectives

- Create a network of commercial and office uses that complement each other to form a commercial mixed-used environment.
- Encourage connectivity through greenbelts, promenade, commercial nodes, and public facilities.
- Promote walkability and bicycle safety through the implementation of adequate sidewalks, bike paths, bicycle parking stalls and connected crosswalks.
- Encourage expansion of commercial opportunities in planned commercial corridors and nodes where infrastructure can support growth.
- Promote land conservation practices through density and building patterns to encourage compact urban form as opposed to sprawl.
- Allow majority of retail and commercial uses in a vertical mixed use context.
- Provide compatible light and heavy commercial uses.
- Support enhancement of the aesthetics of new developments -- design, landscaping, parking, signage -- with special sensitivity to the modern character and historical uniqueness found in the community.



Figure: Shopping Center
(Michael Lee, 2017)

Regional Commercial Uses

Shopping Center

The Shopping Center will be located at the center of the RC. It will offer a large variety of amenities to the surrounding land uses. Groceries, clothes, shoes, reading materials, food courts, and entertainment would all be available in one place. A shopping center will support the surrounding land uses as it is built with variety while considering the

public right-of-way. It will be a family friendly destination that provides a built environment for the many young families that live in the area.

Regional Retail Stores

The regional retail stores will be located along the east side of the project area that is parallel to Geneva Road. The regional retail will be located on Geneva Road to take advantage of the high levels of traffic.

Figure: Target (Sunnyvale Town Center, 2017)



REGIONAL COMMERCIAL



Promenade-Oriented Retail

The promenade-oriented retail are open-air storefronts and restaurants that connect directly with the promenade sidewalk. These retail developments will create pedestrian access without the need to drive from one store to the next. These retail areas will serve the workers from the surrounding office uses.

Office Buildings

The office buildings are designed to provide a professional setting, and to be easily accessible by sidewalks, bike paths, bicycle parking stalls, with parking structures located at the back of the office towers. The vertical commercial mixed-use concept is shown in this figure with restaurants and cafes located on the ground floor and conference centers and offices on the floors above it. This design offers office workers close and convenient places to socialize and meet.



Figure: SoDa (South Daybreak) Row, South Jordan, UT (2017)



TRANSITION ZONE: CONNECTING STUDENTS, RESIDENTS, AND PROFESSIONALS

The purpose of the transition zone between the UVU North Campus and the proposed future office buildings is to create a bridge of common interests between up-and-coming student professionals and current working professionals. This transition will also consider current and future Vineyard residents.

Transition Area Overview

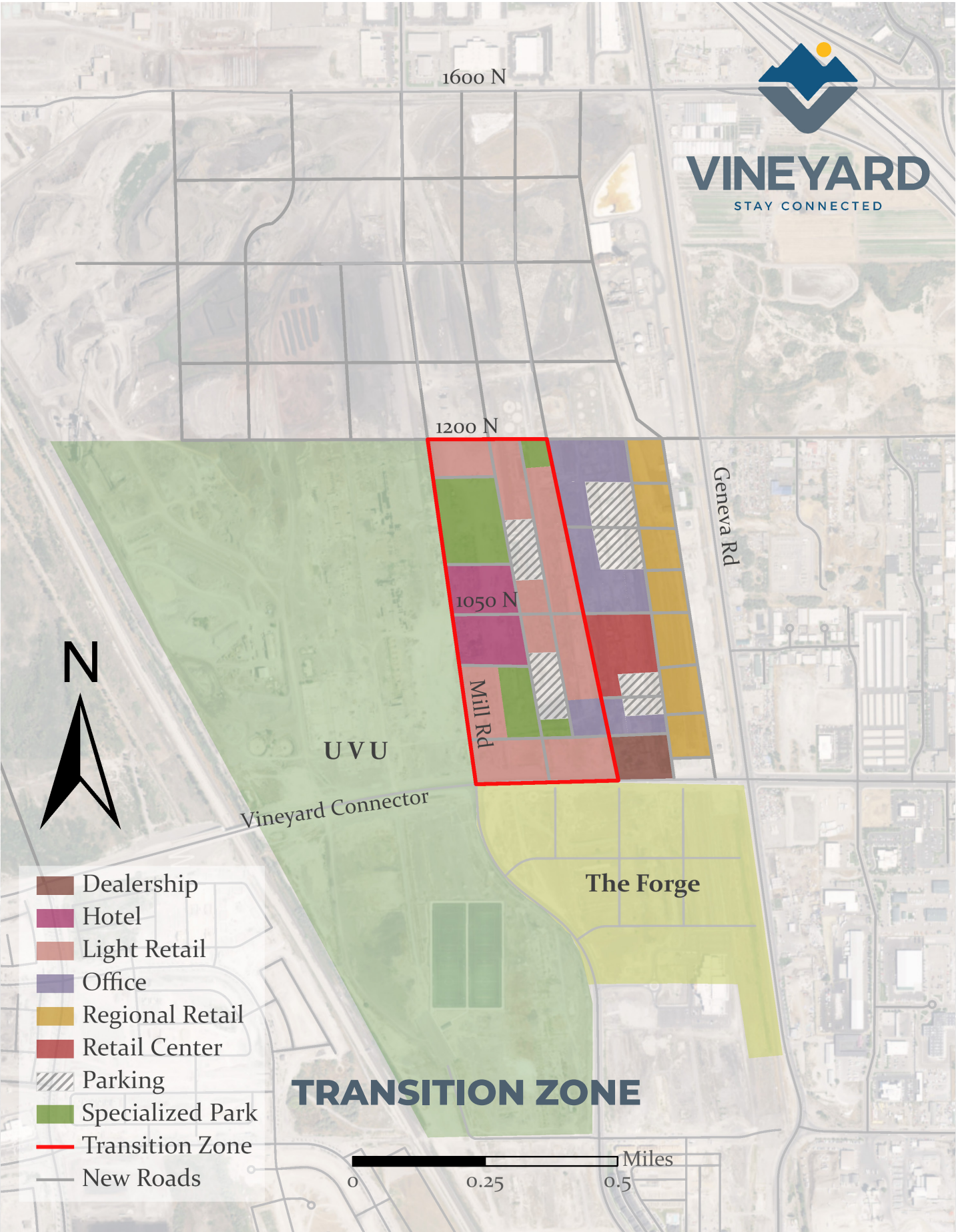
The primary focus of the designated transition zone connecting UVU North Campus and

incoming professional office buildings will be situated between the Vineyard Connector and 1200 North to the north and south and between the Mill Road extension and the proposed peripheral road to the east. Future buildings and spaces will not necessarily be confined to these boundaries, but the most uses regarding transition for students and professionals will be within this area.

Hotels

The designated transition zone will include spaces for two hotels located on the northeast and southeast corners of 1050 West and the future extension of Mill Road. Building fronts will face 1050 West with entrances and drop-off points behind the hotels. Parking structures for both hotels will be located behind each hotel and include a covered pathway between the parking structure and the hotel.

REGIONAL COMMERCIAL



The space for the hotels will be located between UVU North Campus and the future designated spaces for office buildings. These hotels will provide visitors and tourists a place to stay while they conduct business with UVU or with offices in the project area. Visitors will be within walking distance to not only UVU and offices but also shopping areas and ground-level dining. Restaurants will be incorporated into the ground level of the hotel buildings for those occupying either hotel and for nearby pedestrians. Visitors staying in hotels will enjoy views of the Wasatch Mountains to the east and Utah Lake to the west. These hotels will be the first ones built in the city of Vineyard and will be a vital source for outside tax revenue for the city.

Light Retail

The designated transition zone will largely consist of light retail areas to be included near the hotels and promenade. These areas will provide a variety of goods and services for students, office professionals, and local residents. Stores within the light retail include, but are not limited to: apparel, footwear, sportswear, accessories, toys, and games. Boutiques, restaurants, ice cream shops, and eateries will also be included as part of the light retail. Like the hotels, the light retail will be placed between the North Campus and the proposed office buildings to serve students and office professionals coming from campus or work. The light retail will also serve local residents and outside visitors.

**Figure: Proposed Hotel in Hyde Park, Chicago, IL
(Chicago Architecture, 2016)**





Figure: Great Notley Country Park, UK (2017)

Specialized Parks

In an effort to promote active and healthy lifestyles for residents and visitors in Vineyard, some type of specialized park is recommended in the designated transition zone. Specialized parks may include, but are not limited to: a skate park, a hammock park, an outdoor concert area, a dog park, and a sky obstacle course. People that visit these specialized parks could vary by age and intent, but they will cater to residents and visitors alike. A college-aged student might take a break from homework and walk over to the hammock park and hang out in their favorite spot. A working professional might take the family and their dog to enjoy the dog park. Teenagers may find a cool hangout spot at the skate park. These specialized parks will give visitors and residents alike a reason to visit them.

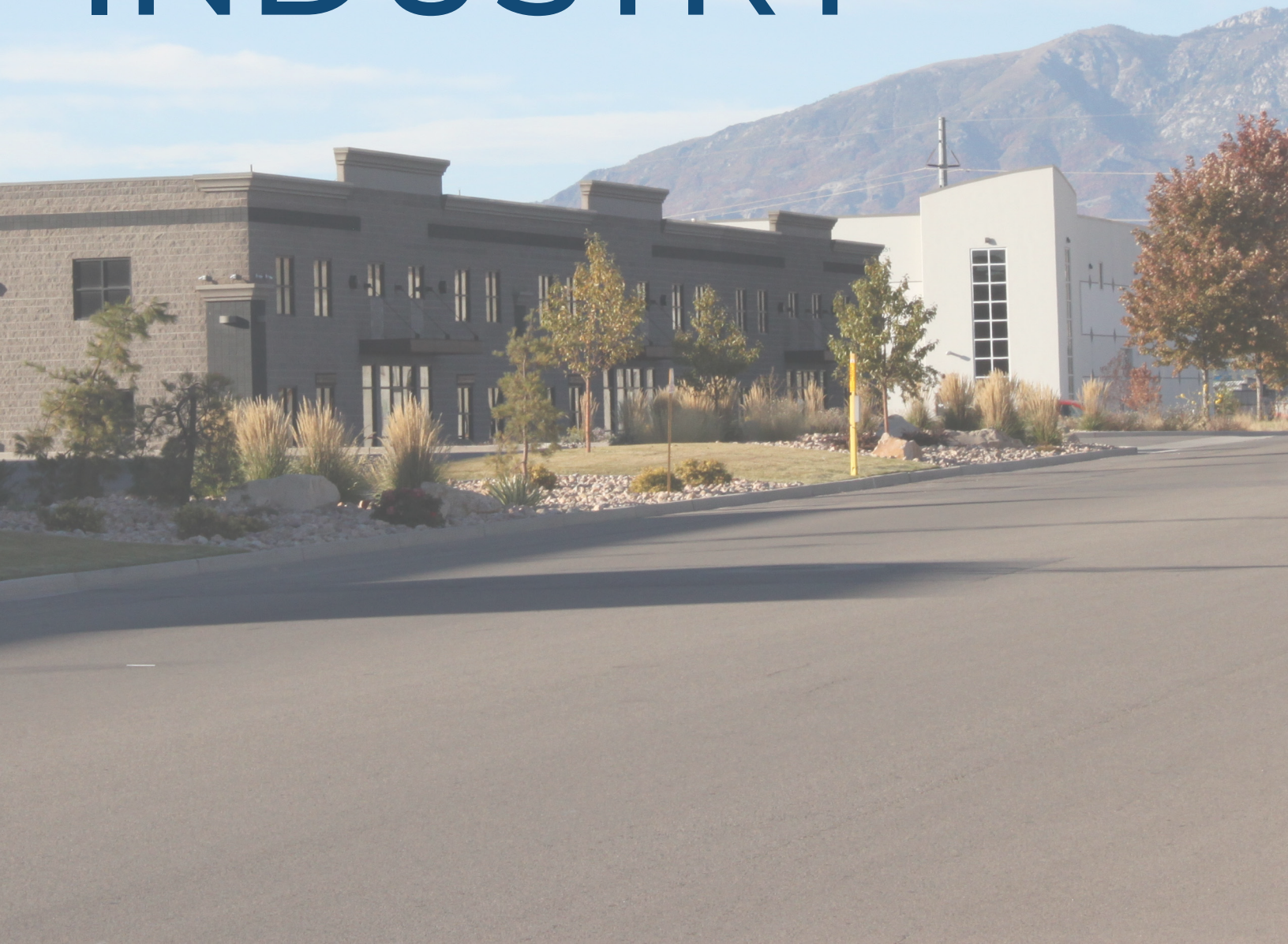
Recommendations

- Designate space for two future hotel buildings to accommodate those visiting UVU North Campus and visitors

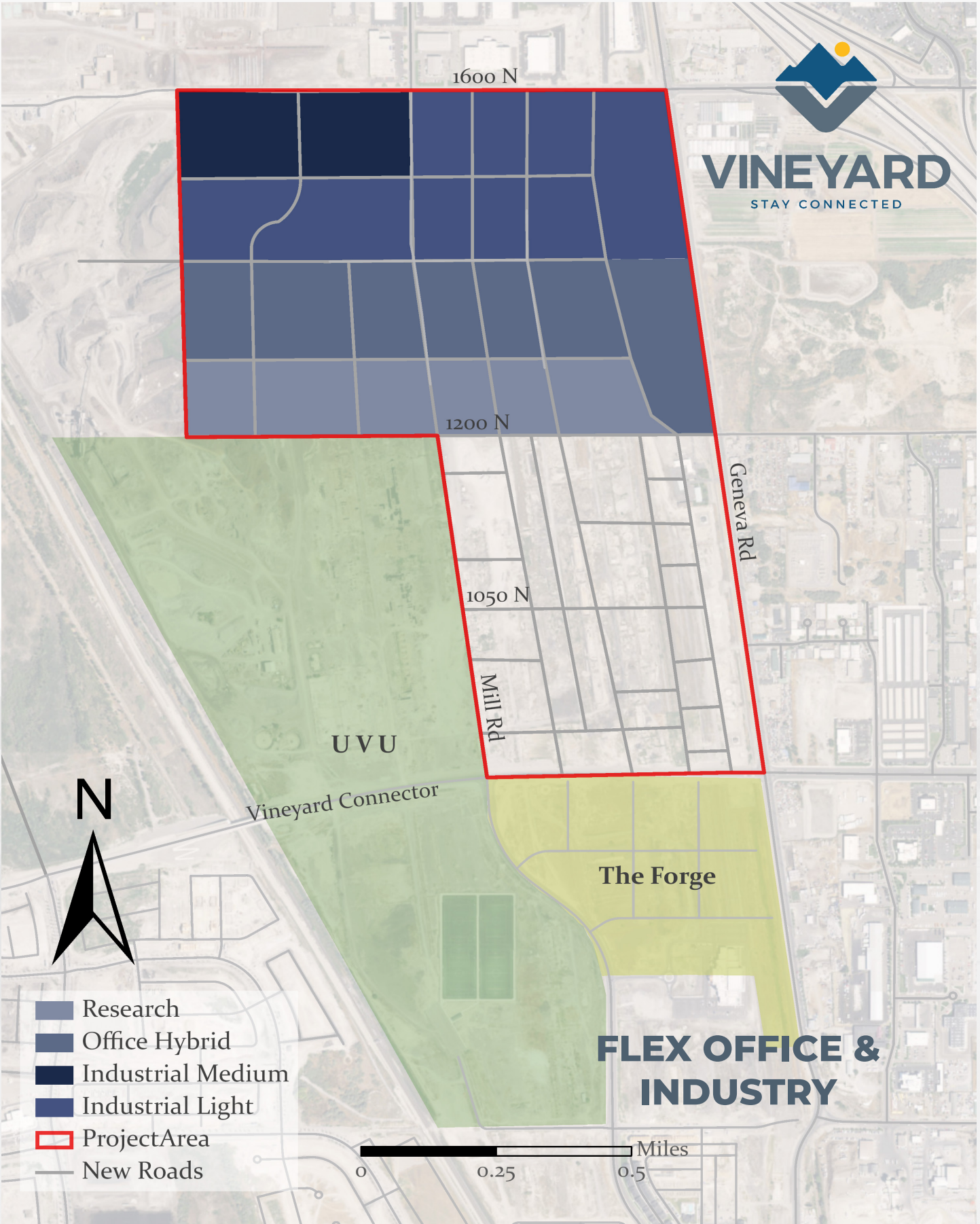
conducting business for future companies within the project site.

- Provide UVU students attending the North Campus and business professionals places to shop and dine.
- Incorporate the promenade and pedestrian-friendly roads to enhance walkability between UVU North Campus and future office buildings.
- Promote active and healthy lifestyles by providing outdoor recreational areas for residents and visitors.
- Encourage the growth of local business in Vineyard and provide a foundation for start-up companies seeking to expand their clientele.
- Connect university students with career opportunities in the Vineyard area and bring more future residents to Vineyard.
- Foster a positive, long-lasting relationship with UVU, local business, and future professional companies.

FLEX OFFICE & INDUSTRY



FLEX OFFICE & INDUSTRY



**Figure: Office Hybrid
(Adolfo Pesquera, 2016)**



Office Hybrid Designation (OB)

This zone will be a transition designation between commercial and industrial areas. It will include businesses whose operations create limited nuisances of excessive sound, air pollution, and smell. Operations will occur within buildings. These regulations will make the buildings compatible with non-industrial businesses near them. The southern section of the industrial area will be designated OB. It will border the UVU sports complex and the mixed use/commercial part of the project area and provide a transition with the research and development (R&D) designation.

Light Industrial Designation (LI)

The IL designation's purpose is to provide Vineyard with high-quality light industrial development that provide jobs to the city. These buildings will not produce any nuisance to the city. There will be limited outdoor activities such as loading, service, and storage. It will make up the bulk of the industrial zone for the project area; situated mostly in the northern section.



**Figure: Light Industrial
Warehouse (Jacqueline
Fernandez, 2016)**

Medium Industrial Designation – IM

The purpose of this designation is to provide for manufacturing, processing, and assembly distribution. This designation will be placed near collector roadways. The separation of this designation from commercial and residential designations is important in preserving the safety and enjoyment of the surrounding designations. The medium industrial designation will be situated in the northwest corner of the project area thus allowing it to meet the requirements of being near collector roads.

R&D Designation – R

The R&D designation is geared toward recruiting high-end businesses to Vineyard. Staying true to Vineyard's General Plan, these businesses will be focused on “exhibiting high standards of design, landscaping, traffic access and circulation (as well) as provision of amenities.” Businesses will best achieve these goals by maintaining a campus-styled landscape to encourage green open space. These campus-styled businesses will act as a buffer between the commercial and industrial sectors of Vineyard.

Figure: Dearborn Campus, Ford Motors (2016)



Location

The R&D designation will be adjacent to the south side of the Industrial designation. Across 1200 North will be the Commercial Retail designation as well as the UVU campus expansion.

Opportunities and Constraints

The R&D designation will have the opportunity to bring character into the industrial designation of Vineyard. The idea is to create a lower-density industrial designation that requires open space and quality streetscaping to allow a thoroughfare between the corresponding designations. Commuters and pedestrians will have access to the commercial retail and industrial sectors through the pedestrian friendly R&D designation. The key to success in this designation is to implement wide sidewalks, quality lighting structures, “urban furniture,” and pedestrian security along with state of the art architectural buildings.

With roughly 39% of its population achieving a bachelor’s degree or higher, Vineyard is a prime destination for top companies. Opportunities exist further with the location of the proposed UVU campus expansion being located diagonally from the R&D designation.

A condition that will need to be addressed is the level of traffic running alongside this development. The R&D designation will be located between two major thoroughfares in



Figure: Adobe Lehi Campus (Staker Parson, 2013)

Mill Road and the proposed 1200 North road. There will be heavy traffic along these roads with the opportunity for public transportation routes to be established and utilized.

Recommendations

- Allocate Research and Development designation to buffer RC zone and UVU
- Carry the strong character of the Vineyard’s downtown and commercial sectors to the industrial sector.
- Create a buffer zone between the two sectors by allowing for pedestrian-friendly transportation.
- Maintain a campus-styled landscape.
- Incorporate green space.

CONNECTIVITY



OVERVIEW

The vision of this section is to establish the importance of creating continuity between this plan and the areas that surround it. A crucial part of making the RC and FOI uses successful is connecting them to the rest of Vineyard by utilizing multiple forms of transportation. This section discusses the importance of design standards and techniques that will show how development can be well connected and accessible through multiple forms of transportation such as pedestrian, bicycle, public transit, and vehicular uses.

THE PROMENADE

One of Vineyard's main objective is to incorporate an interconnected system of parks and trails. A promenade would be the focal point for that vision, as promenades are an effective means of creating natural pedestrian traffic. Promenades are used as a central node that promote pedestrian activity and connectivity with other land and transportation uses, all within a natural social environment. A promenade would be the backbone for the project area and would encourage a strong social setting that would be key for attracting large businesses.



Figure: Loci (2017) of Daybreak, UT

WHAT MAKES A GREAT PLACE?

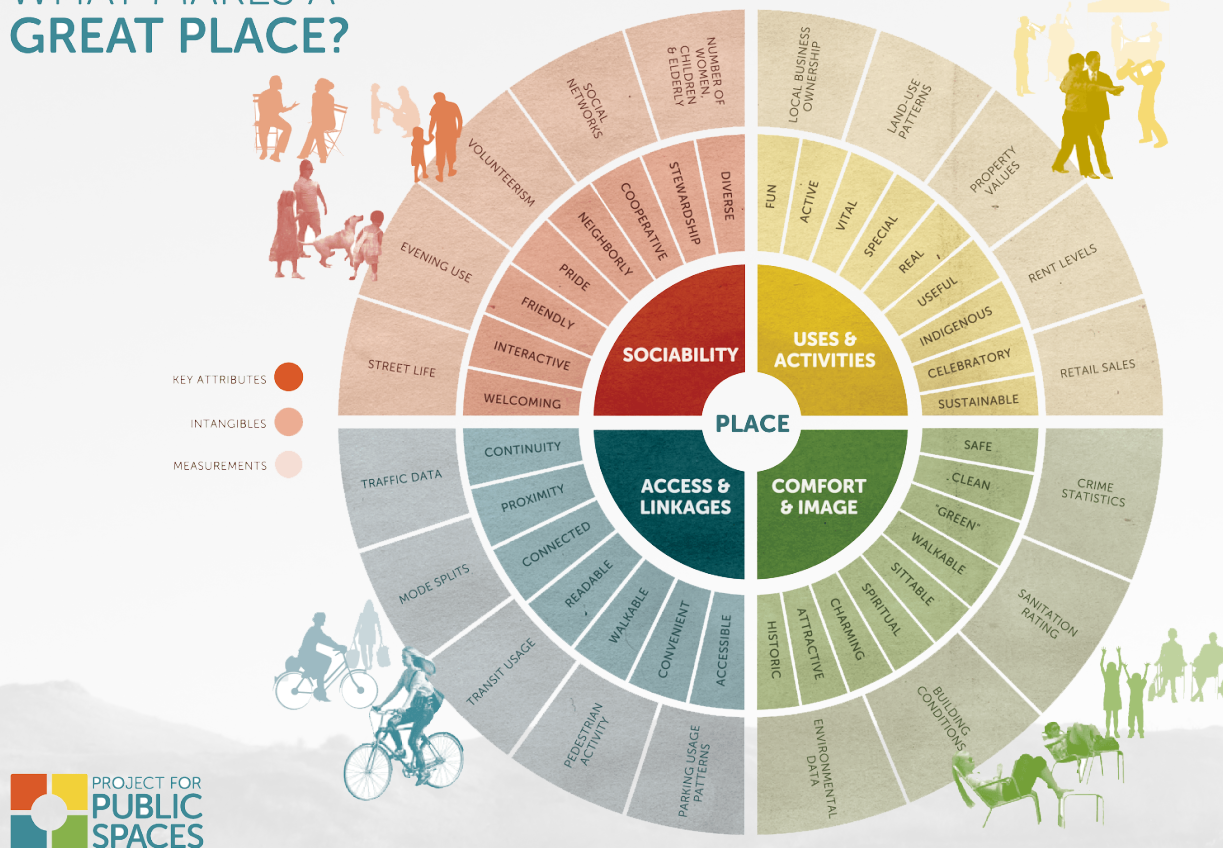


Figure: What Makes a Great Place? (Project for Public Spaces, 2017)

Importance of Social Spaces

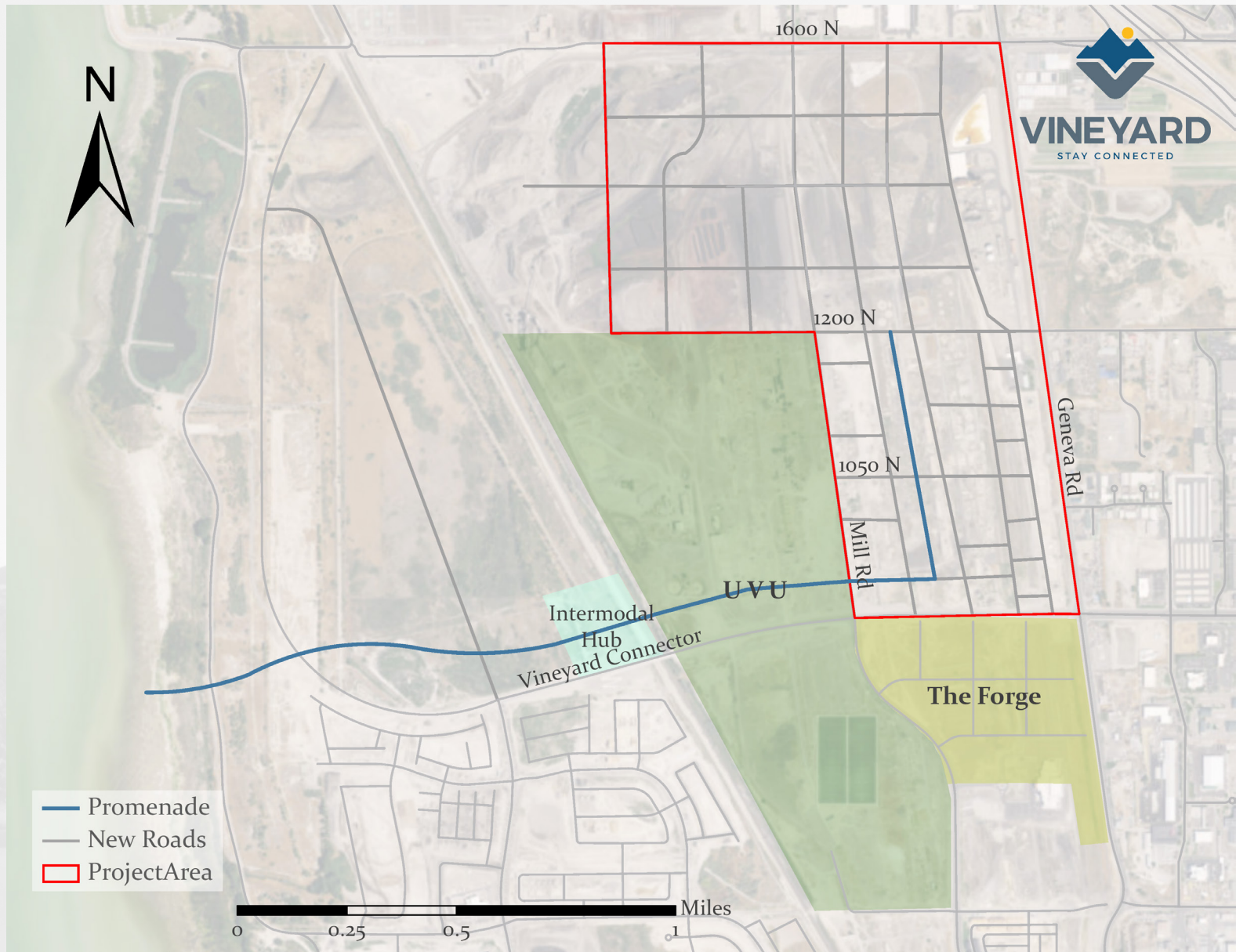
Promenades are specifically designed for those who are walking, and as such typically are designed next to a body of water or green space to promote interaction with the natural environment. A promenade is successful when it is able to create a recreational space where pedestrians can walk, exercise, and interact with the space around them. Successful promenades combine green space with easy accessibility and encourage pedestrian use. A good promenade creates a balance of safety,

leisure, and interaction with the environment. Pocket parks and green spaces are typically utilized along a promenade to create a space for families and to add an element of comfort along the path. A promenade differs from an everyday sidewalk because promenades are usually built with benches and pocket parks so that pedestrians can enjoy a comfortable social setting isolated from roads and traffic.

Promenade Designs



Figures: SketchUp model of promenade (Briam Amaya, 2017)



CONTINUATION OF VINEYARD PROMENADE THROUGHOUT THE GENEVA PATHWAY

Recommendations

- Vineyard should work with UVU and Anderson Group to continue its planned promenade through the project site.
- Vineyard should connect its trail system to the site by way of the promenade.
- The promenade should be a designated pedestrian thruway, isolated from roads and vehicle traffic.
- All neighboring land uses should front the promenade in order to promote pedestrian activity.

STREET LAYOUT

This document discusses the importance of integrating both connectivity and walkability within a TOD. The street layout governs how these principles interact. Grid systems have been greatly successful in promoting walkability and connectability. Gridded streets promote connectivity because there are no dead-ends and gridded streets break down blocks into reasonably walkable distances. Gridded streets are also useful in promoting mixed-used zoning and makes TOD more efficient because of its connectivity. These goals are impossible to achieve when gridded streets are replaced with collector roads. Having an overarching street grid creates a more intimate environment for pedestrians and public transit.

Connecting The Geneva Pathway with the Planned Town Center

Multiple connections will be made across UTA's (Utah Transit Authority) tracks between the small area plan and Vineyard's planned Town Center. This will be done by using the promenade as well as 1200 and 1600 north to connect the two developments.

Street Width and Design

Wide, five lane roads with large curb radii will promote the rapid movement of automobiles. Narrow, two or three lane streets with small curb radii, or bulb-outs, will make for slower speeds. Individual streets in the site area will utilize various widths and designs for arterial and peripheral roads to achieve the intended speed of each thoroughfare.

Traffic Calming Techniques

Curb extensions, bulbouts or raised crosswalks will be implemented throughout the development to ensure safety of pedestrians, especially where planned trails, paths, and promenade cross any street. It is essential that safety is ensured to promote alternate modes of transportation.

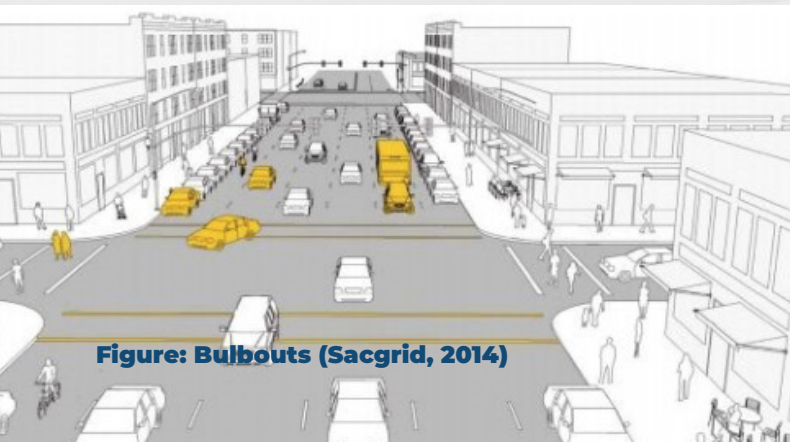


Figure: Bulbouts (Sacgrid, 2014)



Boulevard on Mill Rd.

Mill Road will be built as a boulevard to ensure the connection between the UVU campus and The Geneva Pathway. The boulevard will exist to break up the large roadways by creating buffers between commercial and residential street edges from the high-speed thruway. Buffers will be created with the use of raised planters, on-street parking, bike lanes, and trees. These buffers will create complete streets that provide for multiple transportation uses and not just private automobiles. This boulevard will create a sense of place by utilizing aesthetically pleasing design and traffic calming techniques.

Figure: Current condition of Mill Road (2017)

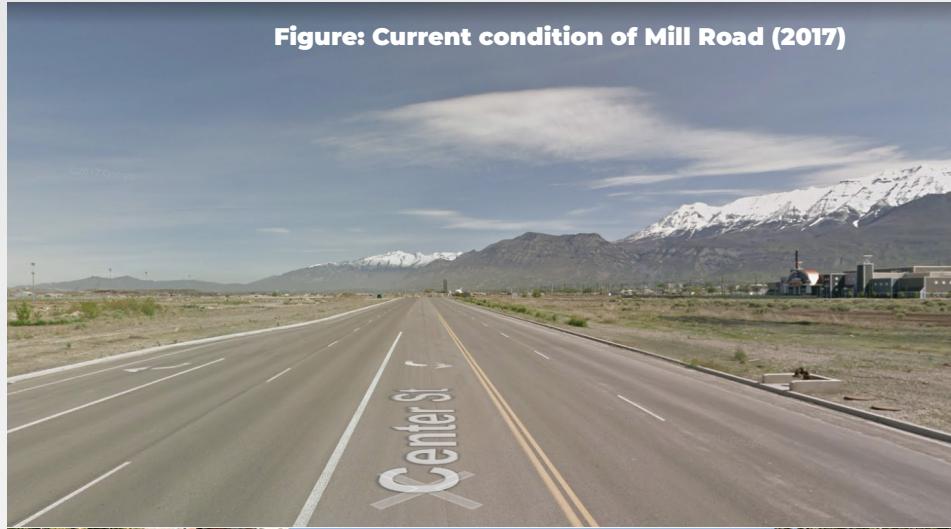


Figure: Provo Center Street (City of Provo, 2015)

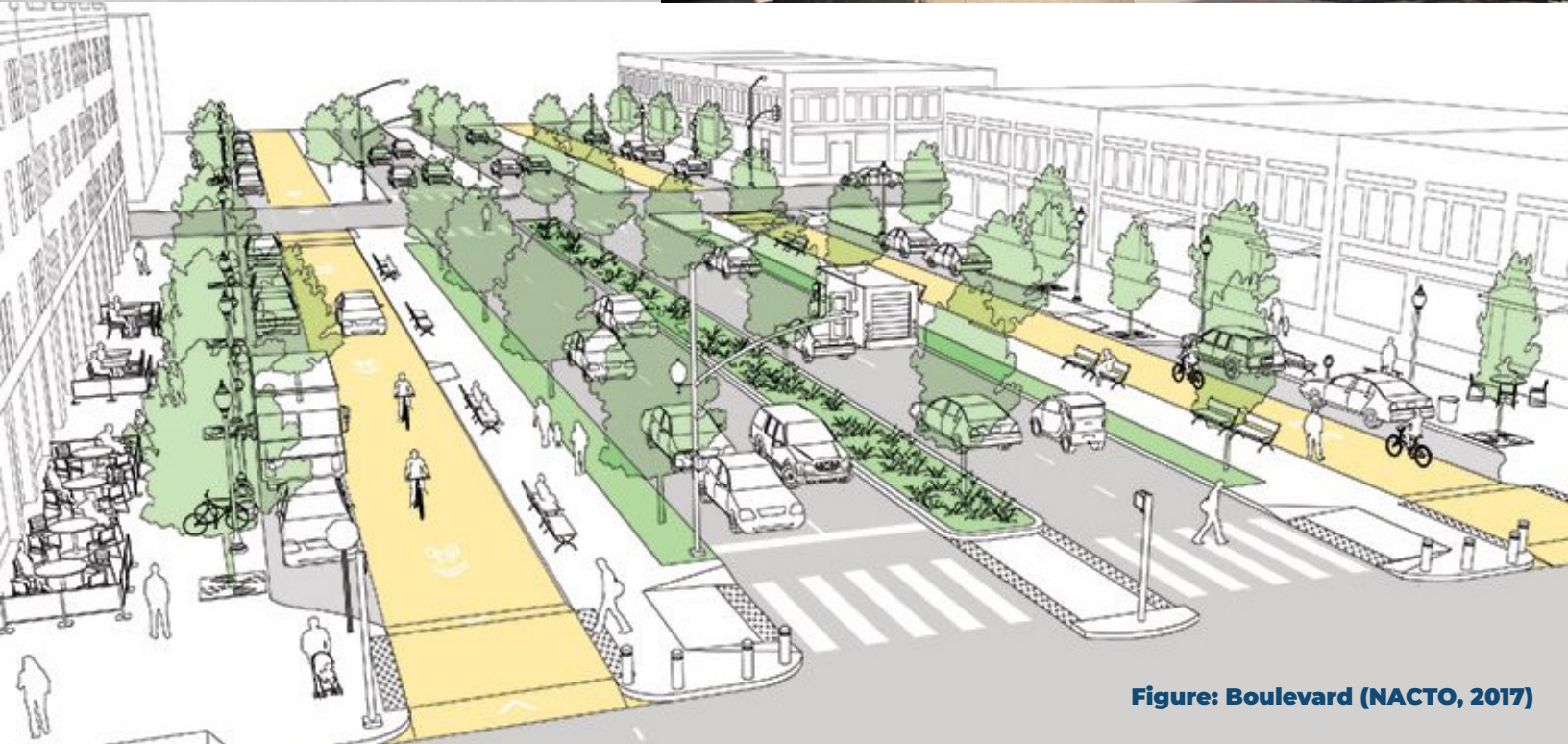


Figure: Boulevard (NACTO, 2017)

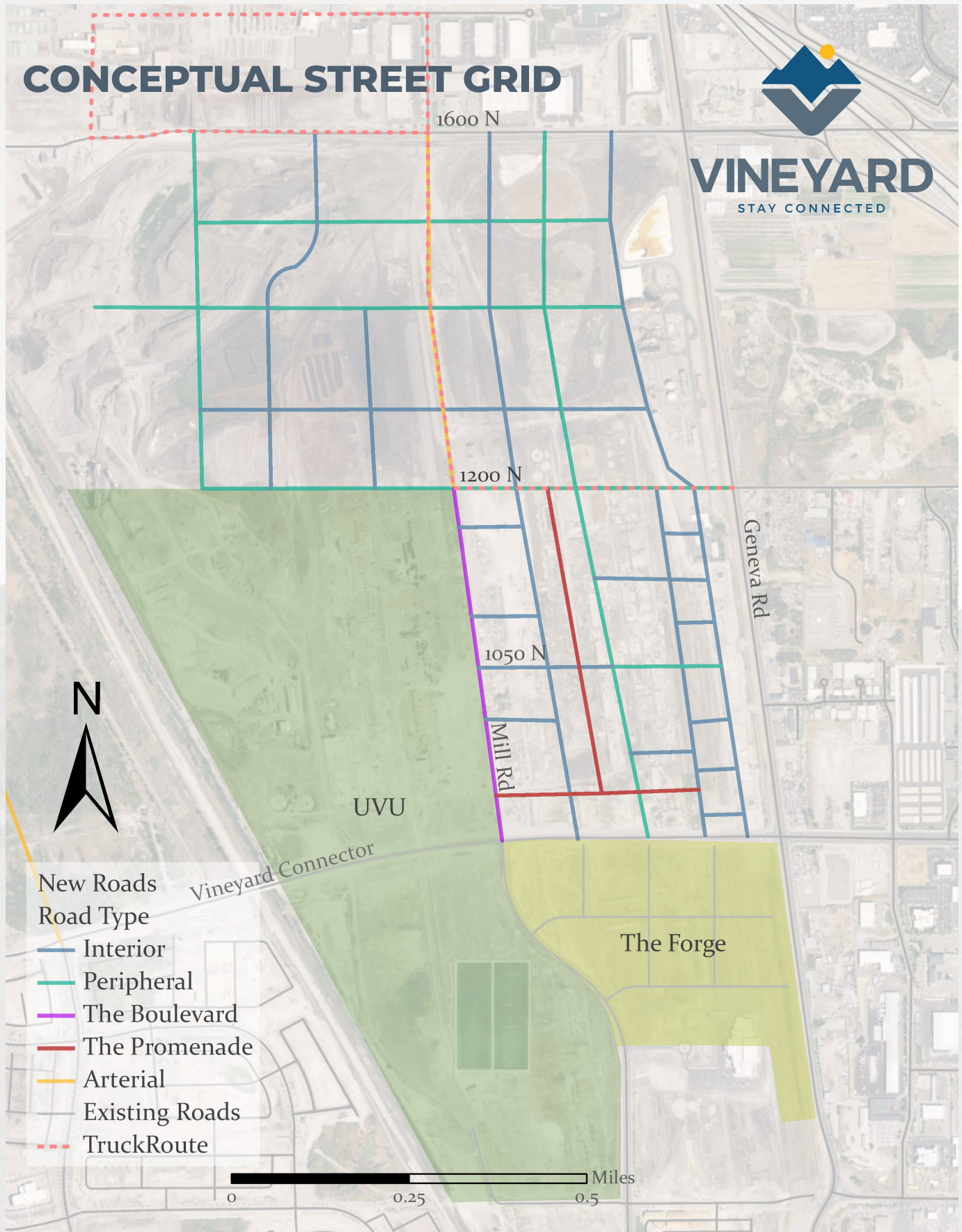


Figure: On-Street Parking (UPA Concordia, 2015)



Truck Routes

Semi-truck traffic should be kept to a minimum in the RC portion of the site where intensive commercial zoning will exist. Narrow streets will be required to accommodate the pedestrian traffic from UVU and the intermodal hub. The truck routes will run on 1200 North, Mill Road and 1600 North. This would give trucks the most direct route to I-15 and prevent the need to use narrow streets in the commercial and university campus area.

Recommendations:

- Incorporate a basic grid pattern for this site to enhance connectivity and walkability.
- Mill Road will be made into a boulevard as a buffer between UVU and the RC zone. Speed of the road will be set between 20-25 mph to help promote safety and a sense of place.

- Implement bulb-outs and curb extensions into the design of Mill Road to increase pedestrian safety between the UVU campus and the RC zone.

ON-STREET PARKING

On-street parking contributes to the connection of the public right of way to the entrance of businesses while encouraging well designed frontage of buildings. On-street parking will be a barrier between pedestrians and vehicular traffic. Cars parked along streets will calm traffic, causing drivers to drive at a slower speed.

Off-Street Parking

Pedestrians and public transit are encouraged by positioning buildings close to the street and placing the parking at the center of the development or block. Buildings that are not surrounded by parking are more accessible to the public right-of-way because of their proximity to other land uses.

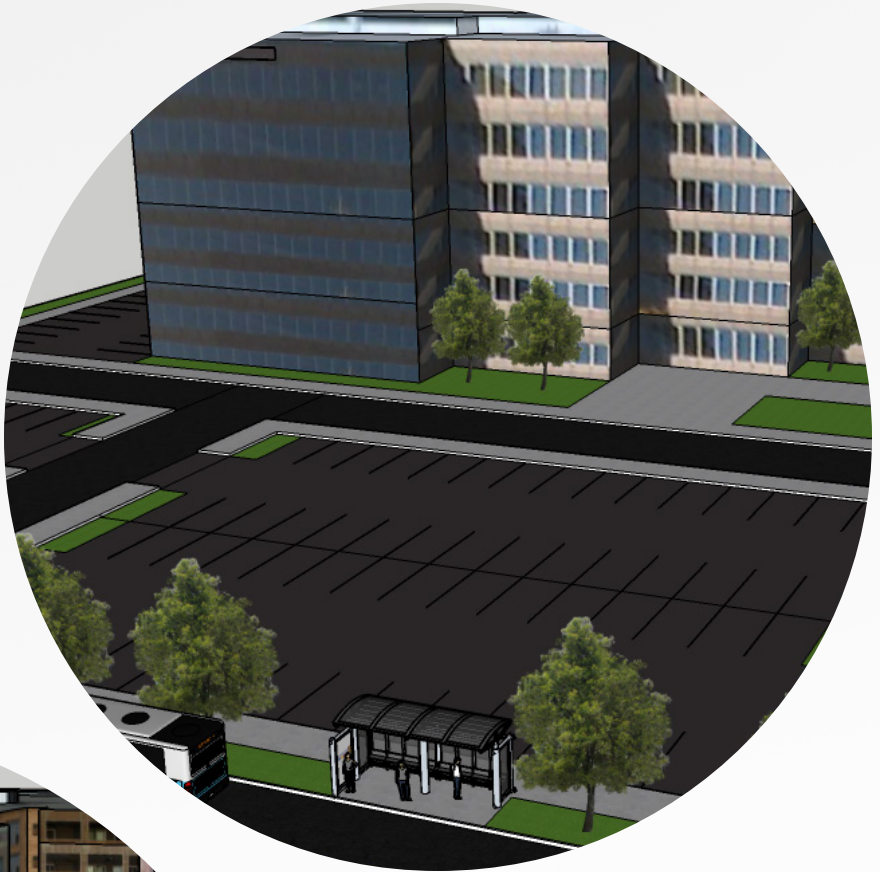


Figure: Example of poor parking development (Miles Miller, 2017)

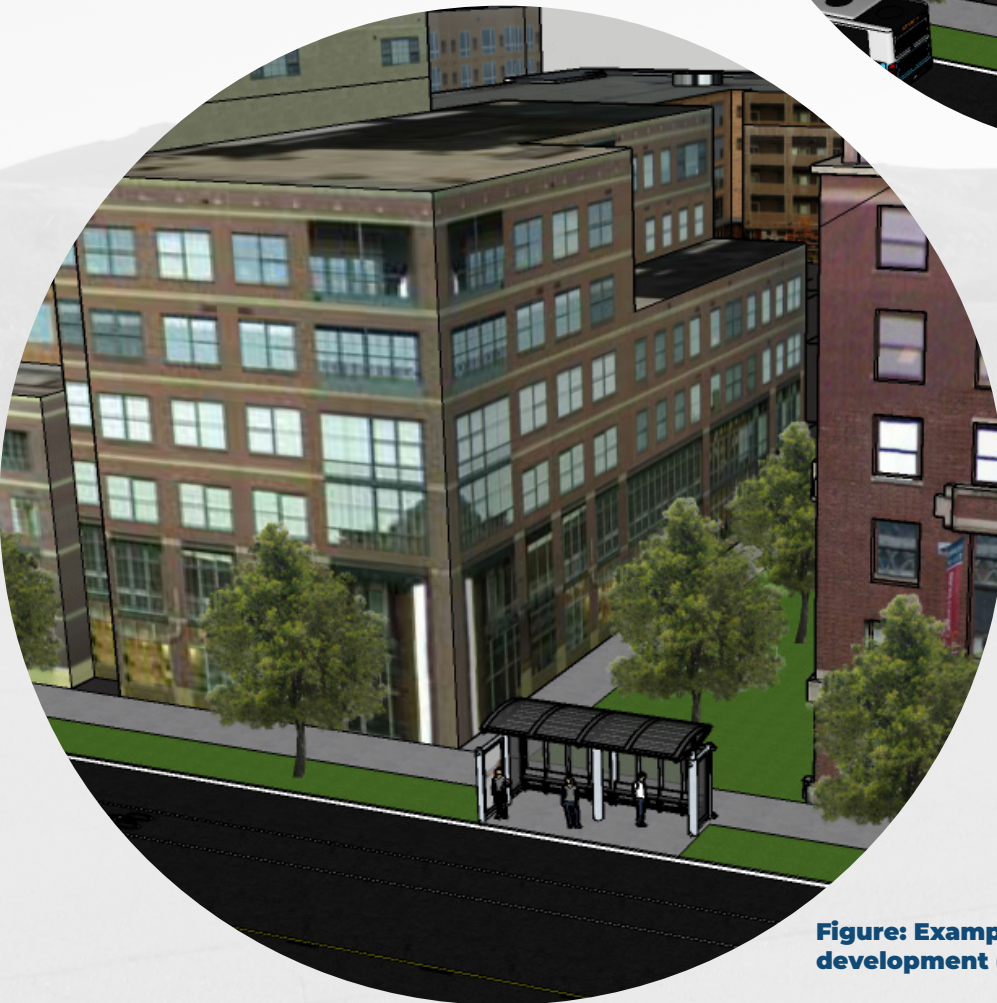


Figure: Example of parking in center of development (Miles Miller, 2017)

Recommendations:

- Require on-street parking to connect the public right-of-way and building entrances.
- Regulate where parking lots are located

PUBLIC TRANSIT

TODs

TODs are highly dense, walkable, transit-focused areas. High density developments are necessary to sustain growth due to the small geography of Vineyard. These developments are walkable and transit oriented to reduce traffic congestion and dependence on automobiles. Through mixed-use developments, TODs encourage citizens to live, shop, and work in Vineyard.

Vineyard's Intermodal Hub

Vineyard has potential for creating an intermodal hub with a FrontRunner station being planned for development as well as the potential for Light Rail Transit (LRT). Being located between future downtown Vineyard and the UVU campus makes this area a choice location. The intermodal hub will help Vineyard to be accessible to anyone along the Wasatch Front. Connecting these modes of transit, along with the promenade, bike lanes and bus routes, will help create an area that promotes further growth and impact. The planned promenade will run directly through this hub, connecting the lake and west side of the

tracks with UVU's campus and The Geneva Pathway commercial hub, creating a bike and pedestrian-friendly green belt that ties the west and east sides together. The FrontRunner will be able to provide access to other forms of transportation, as part of the intermodal hub, and provide connection with most parts of the city. Additionally, the future LRT line will connect to the intermodal hub along with other stops in Vineyard and increase the opportunity to build compatible land uses for the planned public transportation infrastructure.

Benefits of Transit Oriented Development



Reduce dependence on driving



Allow residents to live, work, and play in the same area



Reduce the area's carbon footprint or negative impact on the environment



Stimulate the local economy

Figure: Benefits of TODs (Sierra Pierson, 2017)

intermodal Hub Designs



Figures: Future Vineyard Intermodal
(Trevor Walston, Briam Amaya, 2017)

CONNECTIVITY

Bus Options and Routes

Public transportation will benefit Vineyard as it decreases automobile traffic by offering alternative modes of transportation. With no current bus stops or routes, or plans for such in Vineyard, there are a handful of options that Vineyard could pursue; One option is a city bus service, the Vineyard Shuttle. This service would be owned and controlled by the city and would give the city power over routes, frequency, and other issues. Vineyard could use BYU's Ryde system as a model for their own system. The Ryde currently has 5 bus routes that run every thirty minutes. These shuttles provide a better way for students who live a reasonable distance from campus to get to their classes. As Vineyard is not a geographically-large area, only around 7 square miles, running just a few shuttles will connect The Geneva Pathway with Vineyard's future downtown and its residential zones.

Another option would be to work with UTA to extend their current bus routes from west Orem into Vineyard. UTA has routes across Davis, Weber, Salt Lake, and Utah counties. Working with UTA would be helpful as expenses

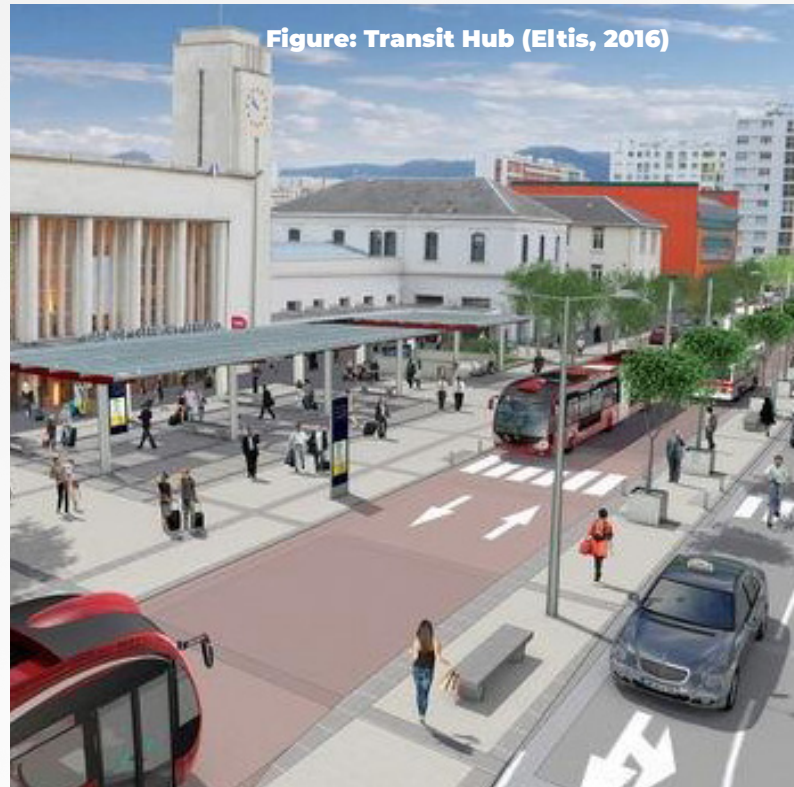


Figure: Transit Hub (Eltis, 2016)

would be cheaper and UTA's system is already familiar to the residents of Utah Valley. UTA is currently putting a Bus Rapid Transit (BRT) system in Provo and Orem and the potential to expand that system into Vineyard could be very beneficial for the city. Also, working with

Figure: Vineyard Shuttle (Trevor Walston, 2017)





Figure: UTA Bus (Visit Utah, 2017)

UTA to expand their current bus system into Vineyard would be more manageable to create routes that also work with FrontRunner, as it is also operated by UTA.

Whatever route Vineyard chooses to take, it is vital to have a public transit system that will connect the residential areas to the commercial areas, the Town Center, UVU, and other areas of Vineyard in order to connect and promote employment and commercialism throughout the city.

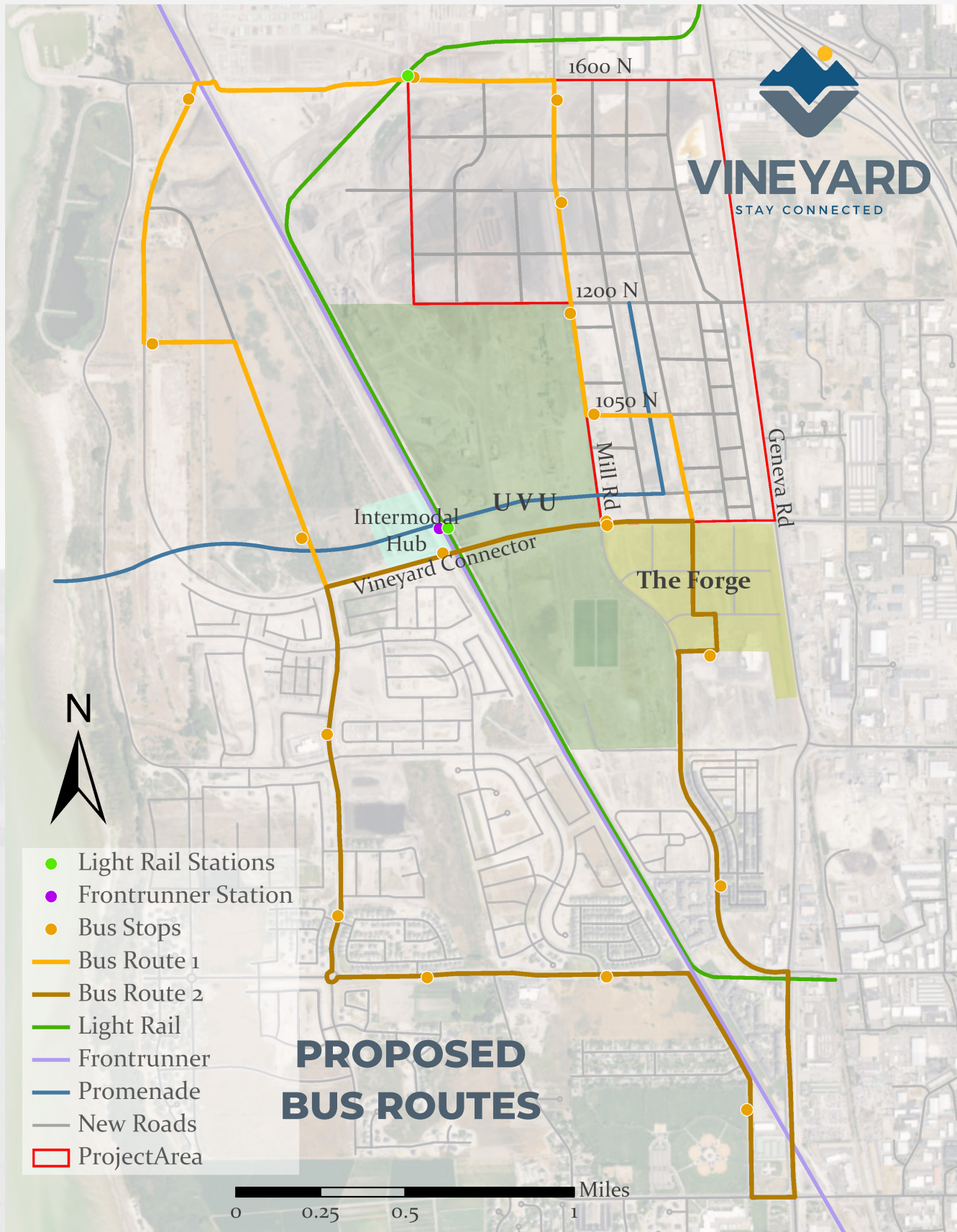
Proposed Bus Routes

The two following proposed bus routes would meet up at the intermodal hub. The southern route connects the residential areas with the Vineyard Connector and the intermodal hub. The northern route connects The Geneva Pathway along with the downtown area and the intermodal hub. This will help provide

access and connectivity within the majority of Vineyard.

Recommendations

- Establish multiple modes of transit to establish connectivity within Vineyard and between surrounding cities.
- Work with UTA to help establish multiple modes of transit: FrontRunner, LRT, and bus options.
- Work with Anderson Group and other developers to encourage TODs.



WALKABILITY AND ACTIVE TRANSPORTATION

Sidewalks

Sidewalks activate streets socially and economically. Safe, accessible and well-maintained sidewalks enhance public health and social capital and are considered a necessary investment for cities. Pedestrians and businesses will be comfortable where sidewalks are designed at an appropriate scale, with sufficient lighting, shade and street-live activity.

Recommendations

- Accommodate high pedestrian volumes and provide ample space for frontage

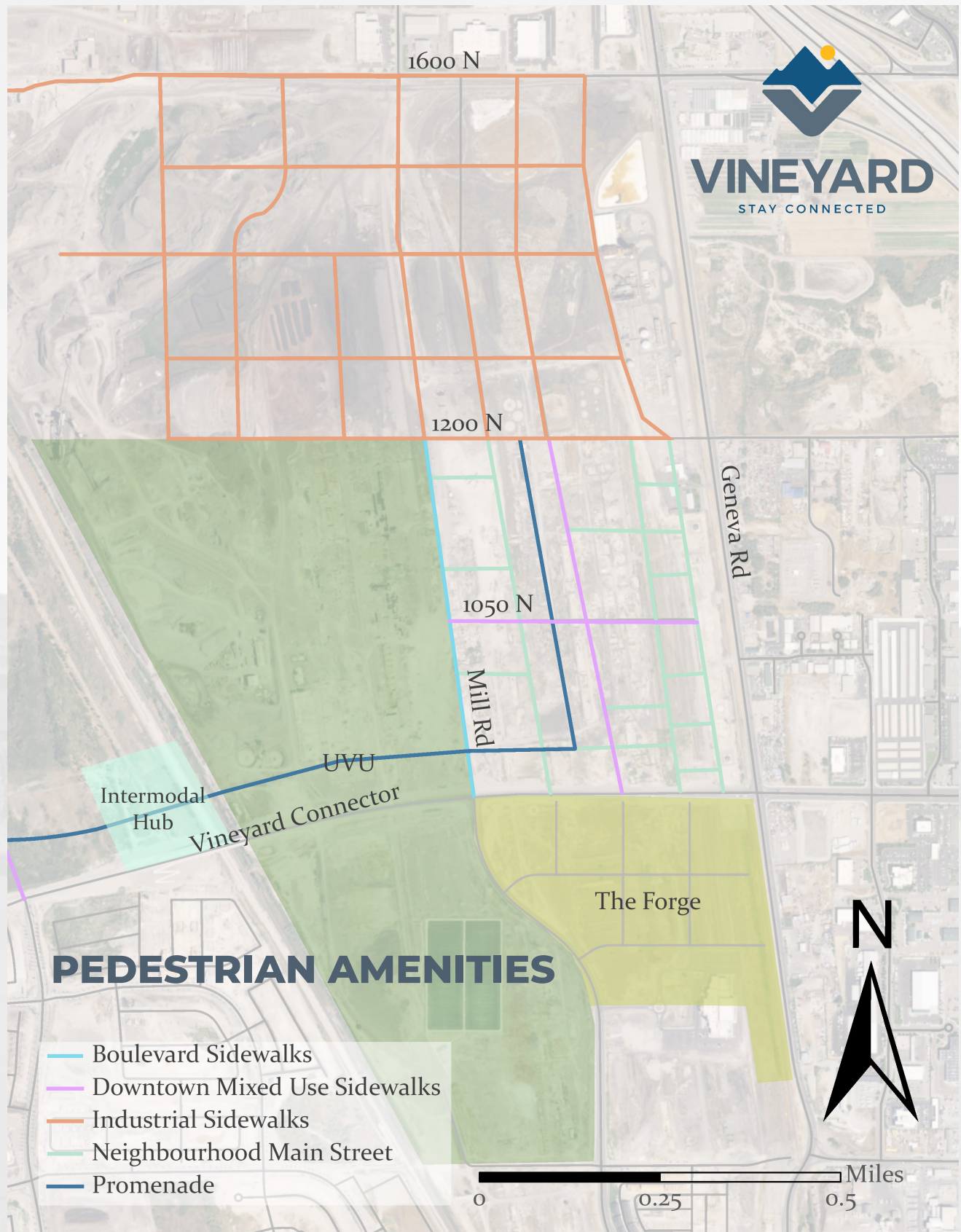
zones, street furniture, bus stops, signage, and bike sharing stations.

- Emphasize sidewalk width and amenities, especially for streets with higher traffic speeds and volumes where pedestrians may otherwise feel unsafe and void walking.
- Provide sidewalks on both sides of all streets in all urban areas.
- Avoid substituting shoulders as a substitute for sidewalks.
- Avoid impeding adjacent walkways with fixed objects such as utility poles, light fixtures, and other street furniture.
- Ensure that sidewalks are well maintained for wheel-chairs and other mobility devices.



Figure: Future walkable sector featuring a variety of transportation methods: transit, cycling, walking, and car. (Briam Amaya, 2017)

CONNECTIVITY



Frontage Zones

The frontage zone is the distance between the pedestrian thruway and the building front. They contain street furniture, signage, merchandise displays and are used as public social spaces.



Figure: Frontage Zone
(i.pinimg.com, 2017)



Figure: Frontage Zone
(blogspot.com, 2017)



Figure: Pedestrian Thru Zone
(madisongroupfunding.com 2017)

Pedestrian Thru Zone

The pedestrian thru zone is the primary, accessible walking zone.



Figure: Pedestrian Thru Zone
(static1.squarespace.com, 2017)



Figure: Pedestrian Thru Zone (typeblog.kvgcreative.com, 2017)

Furnishing Zone

The furnishing zone is the section of the sidewalk between the curb and the pedestrian thru zone. This zone includes landscaping, street furniture, lighting, benches, utility poles, tree pits and bicycle parking. This zone provides a buffer between pedestrians and vehicles.





Figure: Enhancement Zone (Bike Rack San Francisco, CA, 2017)

Enhancement/Buffer Zone

The enhancement/buffer zone is the space immediately adjacent to the sidewalk that consists of curb extensions, landscaping, parklets, stormwater management features, parking, bike racks, bike share stations, and curbside bike lanes or cycle tracks. These elements are consolidated in the enhancement zone to free up sidewalk space for thru travel. Not all sidewalks will have an enhancement/buffer zone.



Figure: Enhancement Zone (Haight St., 2017)



Figure: Enhancement Zone (Bike Rack Boston, MA, 2017)

Street Trees

Street trees enhance city streets both functionally and aesthetically. Trees provide shade to homes, businesses, and pedestrians. Street trees slow traffic speeds, especially when placed on a curb extension in line with on-street parking, and may increase pavement life by displacing extreme heat. Aesthetically, street trees frame the street and the sidewalk. Larger trees protect pedestrians from errant vehicles. Larger trees protect pedestrians from errant vehicles.



Figure: Street Trees
(i.pinimg.com, 2017)



Figure: Street Trees
(White House Elms,
D.C., 2017)

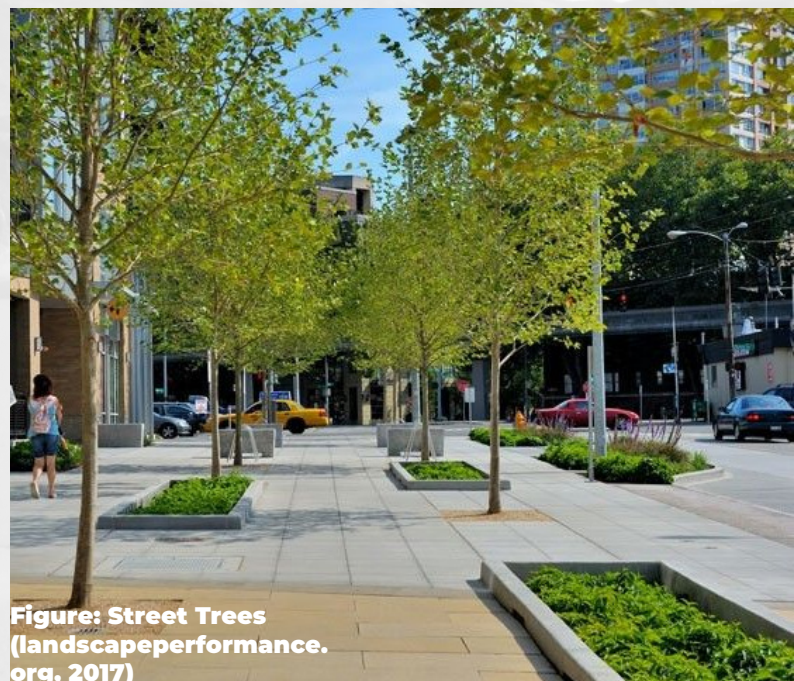


Figure: Street Trees
(landscapeperformance.
org, 2017)

RECOMMENDATIONS: WIDTHS FOR SIDEWALK ZONES

STREET TYPE	FRONTAGE ZONE	PEDESTRIAN THROUGH ZONE	FURNISHING ZONE	ENHANCEMENT /BUFFER ZONE	TOTAL WIDTH
BOULEVARD	6-10 FT	8-12 FT	6-10 FT	6-10 FT	26-42 FT
DOWNTOWN MIXED USE	6-10 FT	6-12 FT	6-10 FT	2-10FT	20-42 FT
NEIGHBORHOOD MAIN STREET	6-8 FT	6-10 FT	4-6 FT	2 FT	18-26 FT
INDUSTRIAL	2-4 FT	4-6 FT	2-4 FT	2 FT	10-16 FT



Figure: Recommended widths for sidewalk zones (Personal Design, 2017).

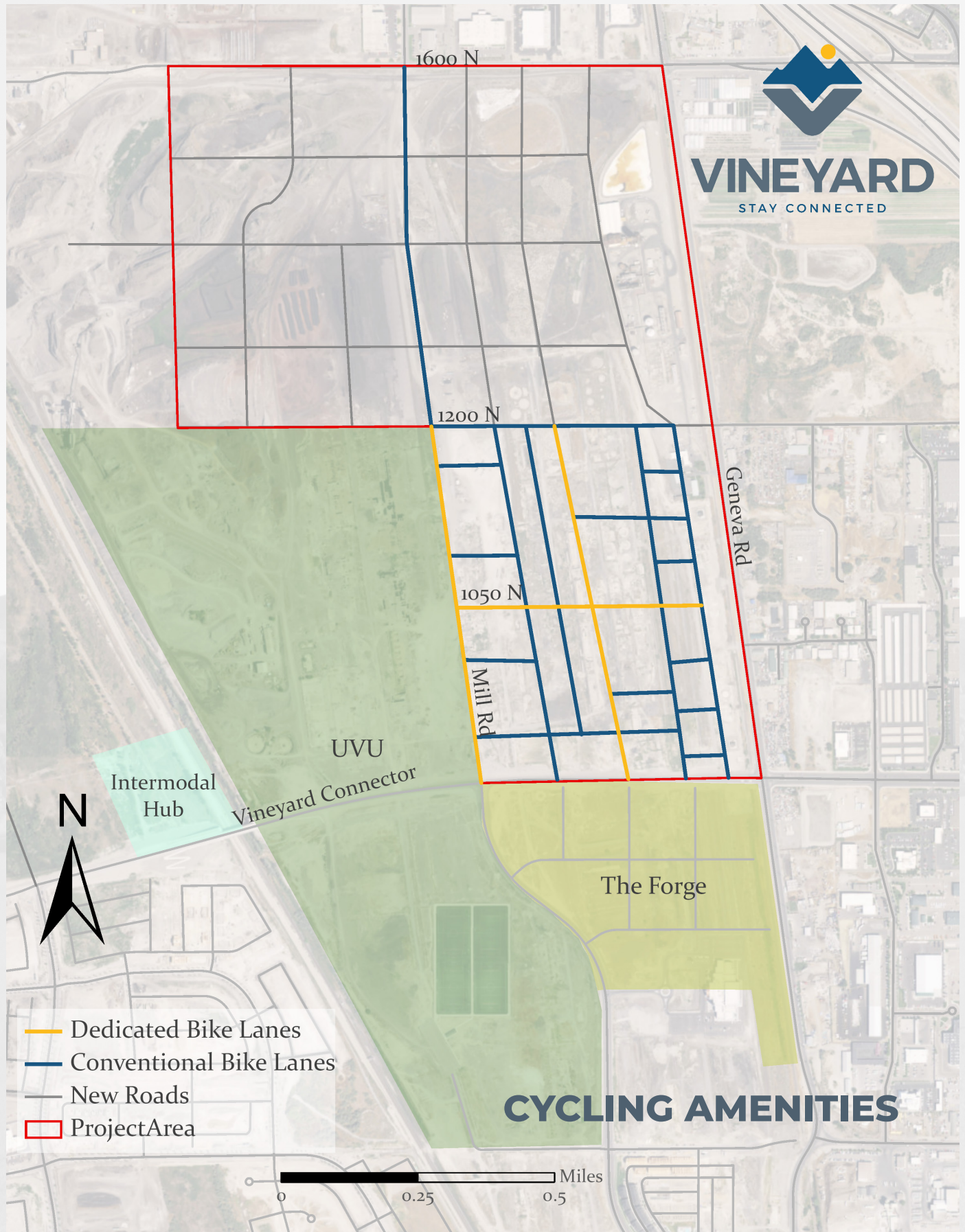
Furnishing Zone

Pedestrian Through Zone

Frontage Zone



VINEYARD
STAY CONNECTED



Bike Lanes

Bike lanes with high level of service provide adequate safety buffers to protect bicyclists from parked and moving vehicles. Bike lanes will be distinguished using colored lane markings, signage and intersection accommodations. Bicyclists will be able to leave the bike lane to pass other bicyclists, make left turns, and avoid obstacles.

Conventional Bike Lanes

Conventional bike lanes are located in the following ways: next to the curb when no parking is present; adjacent to parked cars on the right-hand side of the street; or on the left-hand side of the street when installed on one-way streets. They will be buffered where space permits. Conventional bike lanes increase bicyclist comfort and confidence on busy streets. They create separation between bicyclists and automobiles. They increase the capacity of streets to more than just automobiles.

Recommendations

- Conventional bike lanes to all peripheral roads.
- Implement a network of conventional and buffered bike lanes throughout the city.
- Left side bike lanes, cycle tracks or buffered bike lanes on streets of high traffic.
- 5 ft wide conventional bike lanes adjacent to parking lanes.



Buffered Bike Lanes

Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.

Buffered bike lanes increase the distance between motor vehicles and bicyclists. They provide space for bicyclists to pass other bicyclists without invading the adjacent motor vehicle travel lane. They will encourage cyclists to ride outside the door zone with a buffer between parked cars and the bike lane. They will provide space for cycling without making the bike lane appear wider.

Recommendations

- Buffer width will be 3 ft wide, or wider, with internal crosshatching or striping.
- Buffer will be marked with two solid white lines 6-8 inches thick.
- Bike symbol and arrow markings will be used to identify the bike lane.



KEY RECOMMENDATIONS

EXTEND VINEYARD'S AND UVU'S PLANNED PROMENADE THRU THE RC DEVELOPMENT.

ENHANCE CONNECTIVITY BY USING A GRID SYSTEM AND CONNECTING 1200 NORTH AND 1600 NORTH ACROSS THE TRACKS.

PLAN TRANSIT ORIENTED DEVELOPMENT.

ALLOCATE RESEARCH AND DEVELOPMENT DESIGNATION TO BUFFER RC ZONE AND UVU

INCORPORATE MIXED-USE DEVELOPMENT IN THE RC ZONE.

BUILD OUT MILL ROAD AS A BOULEVARD.

IMPLEMENT ON AND OFF-STREET PARKING TECHNIQUES TO INCREASE CONNECTIVITY.

CONNECT THE AREA WITH ADEQUATE BIKE LANES AND SIDEWALKS.

IMPLEMENTATIONS

RECOMMENDATION	STAKEHOLDER	IMPORTANCE
EXTEND VINEYARD'S PROMENADE THROUGH UVU AND THE RC ZONE.	UVU VINEYARD ANDERSON GROUP	1
INCORPORATE A GRID SYSTEM THROUGHOUT THE GENEVA PATHWAY	VINEYARD ANDERSON GROUP	2
MIXED-USE ZONING (MIXED COMMERCIAL AND RETAIL)	VINEYARD ANDERSON GROUP	3
BUILD MILL ROAD AS A BOULEVARD	VINEYARD ANDERSON GROUP	2
USE SUCCESSFUL ON AND OFF-STREET PARKING TO INCREASE CONNECTIVITY	VINEYARD ANDERSON GROUP	3
PLAN TRANSIT ORIENTED DEVELOPMENT	VINEYARD ANDERSON GROUP	1
RESEARCH AND DEVELOPMENT DESIGNATION TO BUFFER RC AND UVU	UVU VINEYARD ANDERSON GROUP	3
CREATE A SYSTEM OF BIKE LANES	VINEYARD ANDERSON GROUP	4

GLOSSARY

AMENITY: Any feature that provides comfort, convenience, or pleasure.

ARTERIAL ROAD: A high-capacity urban road. The primary function of an arterial road is to deliver traffic from collector roads to freeways or expressways, and between urban centres at the highest level of service possible.

BOULEVARD: A broad avenue in a city, usually having areas at the sides or center for trees, grass, or flowers.

COLLECTOR ROAD: A low-to-moderate-capacity road which serves to move traffic from local streets to arterial roads. Unlike arterials, collector roads are designed to provide access to residential properties.

CONNECTIVITY: The state or quality of being connected or connective.

CORRIDOR: A long, narrow road that also serves as a passageway

CROSSHATCHING: The drawing of two layers of fine, parallel lines at right-angles to create a mesh-like pattern.

CYCLE TRACK: An exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk.

GREEN BELT: An area of open land around a city, on which building is restricted.

INFRASTRUCTURE: The fundamental facilities and systems serving a country, city, or area, as transportation and communication systems, power plants, and schools.

LEVEL OF SERVICE (LOS): A qualitative measure used to relate the quality of traffic service.

COMMERCIAL MIXED-USE: Land designed for diverse functions. In this document's case it does not allow for residential.

MOBILITY: The ability to move freely.

PERIPHERAL ROAD: A road related to, located in, or constituting an outer boundary or periphery.

PUBLIC RIGHT-OF-WAY: An easement dedicated to the public use of transportation; whether automobile, bus, bicyclist, or pedestrian.

PUBLIC SPACE: A space open and accessible to people. Roads (including the pavement), public squares, parks and beaches are typically considered public space.

SCALE: A graduated line, as on a map, representing proportionate size.

SHOULDER: An emergency stopping lane by the verge of a road or motorway, on the right in countries which drive on the right, or on the left side in left-side driving countries.

SIGNAGE: Graphic designs, as symbols, emblems, or words, used especially for identification or as a means of giving directions or warning.

SOCIAL CAPITAL: The interpersonal relationships, institutions, and other social assets of a society or group that can be used to gain advantage.

URBAN AREA: A city area considered as the inner city plus built-up environs, irrespective of local body administrative boundaries.

VISIBILITY: The state of being able to see or be seen.

REFERENCES

1. About Vineyard. (2017). Retrieved from <http://www.vineyard.utah.gov/285/About-Vineyard>
2. Brooks, R. (2017). 20 Ingredients of an Outstanding Downtown.
3. Daybreak, Summer Concert Series. (2015). Retrieved from <http://www.daybreakutah.com/whats-happening/events/summer-concert-series/>
4. Duany, A., Speck, J., & Lydon, M. (2010). The smart growth manual. New York: McGraw Hill.
5. Hamdi, N. (2010). The Placemaker's Guide: To Building Community. New York: Taylor and Francis.
6. Institute of Transportation Engineers. (2017). Retrieved from <https://www.ite.org/css/online/DWUT08.html>
7. Koziarz, J. (2017). Hyde Park's first boutique hotel ready to rise. Curbed Chicago.
8. Litman, T. (2017). Evaluating Public Transit Benefits and Costs. Victoria Transport Policy Institute.
9. Lossau, C., & Zensinger, L. W. (1972). Land use goals, objectives, and policies. St. Louis, MO: East-West Gateway Coordinating Council.
10. Morris, M. (2007). UTA FrontRunner North Commuter Rail Stations; Davis & Weber Counties, UT. VODA Landscape and Planning.
11. National Association of City Transportation Officials. (2017). Retrieved from <https://nacto.org/publications/design-guides/>
12. Provo City planning and Zoning, Provo City Master Plan (2012). p. 12-14.
13. The Ryde Shuttle Service. (2017). Retrieved from <http://sustainability.byu.edu/the-ryde-shuttle-service/>
14. UTA. (2017). Retrieved from <https://www.rideuta.com/>
15. Visit OKC, Boathouse District. (2017) Retrieved from <https://www.visitokc.com/about-okc/okc-districts/boathouse-district/>
16. What is The Ryde? (2017). Retrieved from <http://www.studentmovement.com/>